

How to participate in RIR Policy Development Processes

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How to participate in RIR Policy Development Processes

ASO and ICANN

- Number Resources
 - –What are they?
 - -Where do I get them?
 - –What if I don't qualify?
- RIR PDP



ASO and ICANN

ASO / ASO Address Council

- –Advise ICANN of IP addresses & ASN
- Appoint 2 ICANN Board Members
- Appoint members & participate in ICANN activities



Number Resources: What are they?

- Internet number resources include Internet Protocol (IP) address space (both IPv4 and IPv6) and Autonomous System Numbers (ASNs).
- An IP address is a numeric identifier that includes information about how to reach a network location through the Internet routing system. Every device directly connected to the Internet must have an IP address. Every IP address must be unique for devices to connect to the Internet and to each other.
- An Autonomous System (AS) is a group of IP networks that use a single and clearly defined routing policy. ASNs are globally unique numbers used to identify these groups of networks. ASNs allow an autonomous system to exchange routing information with neighbouring autonomous systems.



Number Resources: Where do I get them?

- You should first check with the Regional Internet Registry in your region. Each RIR community develops its own regional distribution policies. RIR policies generally set minimum criteria for networks that need Internet number resources.
- If your network does not meet those criteria, you should approach an upstream provider, also known as a Local Internet Registry (LIR) or Internet Service Provider (ISP).
- If your network does meet the criteria, you can get resources directly from the RIR. Some regions also have National Internet Registries (NIRs) that work with the RIR to provide resources in their countries.



Number Resources: Where do I get them?









HOME IANA STEWARDSHIP **INTERNET GOVERNANCE STATISTICS ABOUT** IPV6 **POLICIES Getting Internet Number Resources**

RIR COMPARATIVE POLICY OVERVIEW

March 2015

(Version 2015-1)

The goal of this document is to provide a comparative overview of policies across the Regional Internet Registry (RIR) system. It is not a policy statement by the RIRs, but serves as a reference for the Internet community. While this document was accurate on the date of publication (13 April 2015) it may be outdated by subsequent policy implementations. The official policy documents can be found at the respective websites of the RIRs. This is a public document that will be reviewed and revised quarterly through the coordinated efforts of the RIRs.

For more information, refer to the AFRINIC, APNIC, ARIN, LACNIC, and RIPE NCC websites.

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2.5.6 RFC1918 Private Address Space

Global Policies he Num

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RIR Comparative Policy Overview

egional Internet Registries (RIRs)...

READ MORE

uick Reference Points

NA Stewardship Transition and CRISP Team

SO Website 🗸



Number Resources: What if I don't qualify?

- Check with LIR or ISP
- Change policy to meet your needs



INTERNET NUMBER RESOURCE POLICY LIFE CYCLE



INTERNET GOVERNANCE **ECOSYSTEM**

Global Internet Number Resource policy is developed through a bottom-up, open, and inclusive approach. Beginning in geographic regions, issues are raised through the Regional Internet Registry (RIR) communities in the Number Resource Organization (NRO) and brought into the Address Supporting Organization (ASO). Global policies are forwarded to the Internet Corporation for Assigned Names and Numbers (ICANN) Board of Directors and upon ratification, new policy is implemented by ICANN's Internet Assigned Numbers Authority department (IANA) working cooperatively with the RIRs and their constituencies in the respective regions.

The internet ecosystem consists of a collaborative network of organizations responsible for standardization, coordination, administration and day-to-day management in the Internet sphere including the IETF, ICANN performing the IANA function, the RIRs, governments, IGOs and NGOs, and many others. Each organization has a specific role and provides fundamental value to the overall functioning of the Internet.

POLICY DEVELOPMENT

REGIONAL REGIONAL INTERNET POLICY PROCESS

VAL POLICY IMPLEMENTAL

RIR

The NRO represents the 5 RIRs collectively, and established the ASO by agreement with ICANN.

AFRINIC !

Internet Number Resources

(::) APNIC

NGO Non-Governmental Organization NOMCOM Nominating Committee

NRO RIRs Regional Internet Registries ASO AC

The ASO AC oversees the global policy development process for the creation of global Internet Number Resource policies, and delivers agreed policies to ICANIN's Board of Directors for ratification.

Global policies must first be ratified by the RIRs. Each RIR community must ratify an identical version of the proposed policy. This policy is then forwarded by the ASO AC to the ICANN Board for ratification.

POLICY PROCESS

CLOBAL POLICY DEVELOPMENT

development process for global Internet Number Resource policy.

The ASO AC appoints members to the ICANN Board, the ICANN Review , Teams, the NOMCOM and other ,*

AoC

NOMCOM

Review Teams The ICANN Board ratifies global

Global Internet Resource Number policies are implemented by ICANN through the

ICANN

BOARD

Internet Number Resource policies for implementation.

GLOSSARY

IANA ICANN IETF

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Affirmation of Commitments Address Supporting Organization

ASO AC Address Supporting Organization Address Council Internet Assigned Numbers Authority Internet Corporation for Assigned Names and Numbers

Internet Engineering Task Force Inter-Governmental Organization (IPv4 addresses, IPv6 addresses and AS Numbers)

Each regional community contributes three members to the Address Council.

RIRs administer Internet

within their geographic

regions, according to

defined regional policies

RIPE

Number Resources

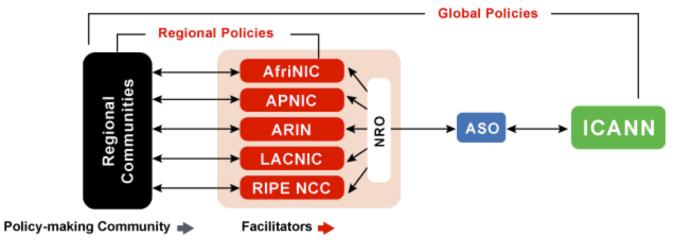
ARIN

lacnic

Number Resource Organization



Global Policy Development



- Each region has its own policy development process
 - All open, transparent, and bottom-up
- Global policy proposals are submitted in all 5 regions
- Each region follows its own process
- It then gets passed to the NRO for review
- And forwarded to the ICANN board



Number Policies: June 2015 Snapshot

2	A	В	(D
1	apnic	prop-114 - Modification in the ASN eligibility criteria	discussion	asn
2	ripe	Remove Multihoming Requirement for AS Number Assignments	discussion	asn
3	arin	1. Recommended Draft Policy ARIN-2014-6: Remove Operational Reverse DNS Text	ratified	dns
4	arin	ARIN-2014-22: Removal of Minimum in Section 4.10	abandoned	ipv4
5	apnic	prop-115 - Registration of detailed assignment information in whois DB	discussion	ipv4
6	apnic	prop-113 - Modification in the IPv4 eligibility criteria	discussion	ipv4
7	arin	5. Draft Policy ARIN-2015-3: Remove 30 day utilization requirement in end-user IPv4 policy	discussion	ipv4
8	lacnic	LAC-2015-1: Trigger 2.3.2.18 when a justified request larger than /22 is	discussion	ipv4
9	afrinic	Resource Reservation for Internet Exchange Points	last call	ipv4
10	afrinic	Anycast Resource Assignments in the AFRINIC region	ratified	ipv4
11	arin	2. Recommended Draft Policy ARIN-2014-21: Modification to CI Pool Size per Section 4.4	ratified	ipv4
12	arin	ARIN-2014-17: Change Utilization Requirements from last-allocation to total-aggregate	ratified	ipv4
13	apnic	prop-112 - On demand expansion of IPv6 address allocation size in legacy IPv6 space	abandoned	ipv6
L4	ripe	Keep IPv6 PI When Requesting IPv6 Allocation	discussion	ipv6
15	ripe	Assessment Criteria for IPv6 Initial Allocation Size	discussion	ipv6
16	arin	3. Draft Policy ARIN-2015-1: Modification to Criteria for IPv6 Initial End-User Assignments	discussion	ipv6
L7	lacnic	LAC-2014-3: Update to the Policy Development Process	ratified	pdp
18	arin	ARIN-2014-1: Out of Region Use	abandoned	region of use
19	afrinic	Out-Of-Region Use of AFRINIC Internet Number Resources	discussion	region of use
20	arin	ARIN-prop-219 Out of region use	discussion	region of use
21	arin	ARIN-2014-14: Needs Attestation for some IPv4 Transfers	abandoned	transfers
22	ripe	Alignment of Transfer Requirements for IPv4 Allocations	discussion	transfers
23	arin	4. Draft Policy ARIN-2015-2: Modify 8.4 (Inter-RIR Transfers to Specified Recipients)	discussion	transfers
24	arin	6. Draft Policy ARIN-2015-4: Modify 8.2 section to better reflect how ARIN handles reorganizations	discussion	transfers
25	arin	ARIN-prop-221 Simplified requirements for demonstrated need for IPv4 transfers	discussion	transfers
26	arin	ARIN-prop-220 Transfers and Multi-national Networks	discussion	transfers
27	lacnic	LAC-2015-2: Inter-RIR Transfers	discussion	transfers
28	ripe	2014-13: Allow AS Number Transfers	ratified	transfers
29	ripe	2014-12: Allow IPv6 Transfers	ratified	transfers
30	ripe	2014-05: Policy for Inter-RIR Transfers of Internet Resources	ratified	transfers
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Number Policies: Summaries

- About 30 proposals in various states of discussion at 5 RIRs
 - –Under Discussion (17)
 - -Last call (1)
 - -Ratified (8) recently or soon to be implemented
 - –Abandoned (4)



Number Policies: Topics

- Autonomous System Numbers (2)
- DNS (in-addr.arpa) (1)
- IPv4 (9)
- IPv6 (4)
- Policy Development Process (1)
- Region of Use (3)
- Transfers (10)



Number Policies: Highlights

- RIPE soon to implement Inter-RIR IPv4 transfer policy (along with ARIN and APNIC which already have this policy)
 - Inter-RIR proposal at LACNIC under discussion
- "Region of Use" proposals at AFRINIC and ARIN.
 - Why? Because IPv4 free pool has run out. And, there is ambiguity about IPv6.
- IPv4 proposals for anycast and critical infrastructure (Internet exchange points)
 - Easier access to number resources (anycast AFRINIC) and holding reserves (for CI – AFRINIC and ARIN)



Number Policies: Links to Full Listings

- AFRINIC Proposal page: http://www.afrinic.net/en/community/policy-development/policy-proposals/
- APNIC Proposal page: http://www.apnic.net/community/policy/proposals
- ARIN Proposal page:
 https://www.arin.net/policy/proposals/
- LACNIC Proposal page: https://politicas.lacnic.net/politicas/list
- RIPE Proposal page:
 http://www.ripe.net/ripe/policies/current-proposals/current-policy-proposals



Number Policies: Participation

Public Policy Meetings

- 14 meetings being held around the world yearly usually in conjunction with network operators
- Open to all interested parties
- Attend in-person or via remote participation means

Mailing Lists

- AFRINIC: https://lists.afrinic.net/pipermail/rpd/
- APNIC: http://mailman.apnic.net/mailing-lists/sig-policy/
- ARIN: http://lists.arin.net/pipermail/arin-ppml/
- LACNIC: http://mail.lacnic.net/pipermail/politicas/
- RIPE: https://www.ripe.net/ripe/mail/archives/address-policy-wg/



Thank you Questions?